

Title (en)

LIQUID LENS MODULE, LENS ASSEMBLY COMPRISING SAME, AND CAMERA MODULE COMPRISING LENS ASSEMBLY

Title (de)

FLÜSSIGKEITSLINSENMODUL, LINSENANORDNUNG DAMIT UND KAMERAMODUL MIT EINER LINSENANORDNUNG

Title (fr)

MODULE DE LENTILLE DE LIQUIDE, ENSEMBLE LENTILLE LE COMPRENANT, ET MODULE DE CAMÉRA COMPRENANT L'ENSEMBLE LENTILLE

Publication

**EP 3745163 A4 20211006 (EN)**

Application

**EP 19743509 A 20190121**

Priority

- KR 20180008345 A 20180123
- KR 2019000846 W 20190121

Abstract (en)

[origin: EP3745163A1] A liquid lens module according to an embodiment can comprise: a liquid lens including M (wherein M is a positive integer of 2 or more) individual electrode sectors and N (wherein N is a positive integer of 1 or more) shared electrode sectors; an upper cover including first to Mth individual terminal parts electrically connected to the first to Mth individual electrode sectors, respectively, and exposed in a first direction perpendicular to an optical axis of an image sensor; and a lower cover, which encompasses the liquid lens together with the upper cover and includes first to nth (wherein  $1 \leq n \leq N$ ) shared terminal parts electrically connected to the first to Nth shared electrode sectors, respectively, and exposed in the first direction.

IPC 8 full level

**G02B 3/14** (2006.01); **G02B 7/04** (2021.01); **G02B 26/00** (2006.01); **H04N 5/225** (2006.01)

CPC (source: EP KR US)

**G02B 3/14** (2013.01 - EP KR US); **G02B 7/04** (2013.01 - EP KR); **G02B 7/282** (2013.01 - US); **G02B 26/004** (2013.01 - EP KR); **G03B 30/00** (2021.01 - KR); **H04N 23/55** (2023.01 - KR); **G02B 27/64** (2013.01 - US)

Citation (search report)

- [Y] CN 201477276 U 20100519 - CREATIVE SENSOR INC
- [Y] US 2017315274 A1 20171102 - PARK SEUNG RYONG [KR], et al
- See also references of WO 2019146980A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

**EP 3745163 A1 20201202**; **EP 3745163 A4 20211006**; **EP 3745163 B1 20240306**; CN 111656227 A 20200911; CN 111656227 B 20220823; JP 2021512361 A 20210513; JP 7274490 B2 20230516; KR 102543699 B1 20230613; KR 20190089599 A 20190731; US 11822101 B2 20231121; US 2021048562 A1 20210218; WO 2019146980 A1 20190801

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